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AUTHOR Estes, Dwain M.
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ABSTRACT

Problem-based learning in educational administration preparation programs is increasingly the focus of university departments, professors, presenters at symposia, and the literature in the field. This increasing attention, while appropriate, creates the need for additional reflection before organizations move ahead with problem-based learning programs. Important issues to consider include determining what content to cover, whether all required content is covered, and how the question of expertise is addressed. Problem-based learning typically stresses the importance of integrating "knowing" and "knowing how," and does not prejudge relevant content. This approach raises concerns among members of governing boards and faculties about whether problem-based learning programs ensure coverage of the appropriate content. Program implementation requires that the faculty learn about problem-based curricula, a key cadre of enthusiasts be developed, the dean's support is offered, and students understand the uncertainties that may arise. In problem-based programs, the nature of the teacher-student relationship changes, with teachers working more as facilitators and provider of resources than purveyors of knowledge. Student assessment and program evaluation are extremely important and require a review of objectives to ascertain desired outcomes. Educators at McMaster University in Canada developed objectives for problem-based learning, including making students active partners, increasing the perceived relevance of content, focusing on conceptual understanding instead of rote memorization, and scheduling less time in the curriculum. (TEJ)

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ISSUES IN PROBLEM-BASED LEARNING

By Dwain M. Estes
University of Texas-Pan American

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Problem-based learning in educational administration preparation programs is becoming ever more popular. More and more departments and individual professors are attempting to implement such programs. More and more papers are being presented at national conferences where the experimenters are sharing their experiences. A special interest group at the annual meeting of the American Educational Research Association gives attention to the area. All of this activity is good for this instructional approach holds great promise; nevertheless, there are some issues that need to be thought about as we move ahead with such programs.

1. One of the issues in problem-based learning is the question of how content is structured. What content is supposed to be covered in the curriculum? How does one know if all of the required content is covered? Problem-based learning takes the position that knowing how to do something is equally as important as knowing subject matter. The question of expertise becomes involved

> On a subject-based conception, expertise tends to be seen in terms of content: to be an expert is to know a lot of content; it is to have 'covered much in one's learning; typically, one has a great deal of propositional knowledge, 'knowledge that (such and such is the case)'. (Margetson, 1998, p. 38)

An alternative understanding of expertise is an ability to make sound judgments as to what is problematic about a situation, to identify the most important problems, and to know how to go about solving or at least ameliorating them. Dealing with problems presupposes prepositional knowledge but does not equate expertise with it. (Margetson, 1998, p. 38)

> Problem-based learning places emphasis on what is needed, on the ability to gain prepositional knowledge as required, and to put it to the most valuable use in a given situation. (Margetson, 1998, p. 38)

Problem-based learning does not deny the importance of content, but it does deny that content is best learned in the abstract, in vast quantities, and memorized in a purely propositional form, to be brought out and applied to problems. Problem-based learning requires a greater integration of knowing that with knowing how. It does not prejudge what is relevant subject-matter. (Margetson, 1998, p. 38)

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Given these positions, there is still a great deal of concern on the part of governing boards and faculties about whether the right content will be learned in a problem-based approach. One university that was seeking approval from the State's Coordinating Board for Higher Education for a new doctoral program emphasized problem-based learning in its presentation to the Board. Some Board members had grave concerns about such an approach. Faculty members also wondered whether "their content" would be covered and to the extent needed.

One university tried to approach the concern by developing a curriculum structure that focused on the Interstate School Leaders Licensure Consortium National Standards. (Council of Chief State School Officers, 1996) Within the standards, a set of leadership themes was adopted to assure emphasis on leadership rather than traditional administration. Within this schema a list of 135 potential issues, concepts, theories and practices for inclusion in the curriculum were created. These topics were presented to students, faculty and some national leaders in the field of educational administration for their prioritization. The feedback form the various groups was analyzed and sixty-five topics were organized by standard, by theme and by year into a curriculum sequence. The objective was to indicate what content was to be covered in the curriculum and to make sure that in the implementation of problem-based learning, no gaps were left in the program.

This approach still begs the question of the extent to which problems identified determine the content covered and place of a preset amount of content that must be included in the program.

2. Implementation of a problem-based curriculum requires at least four considerations:

a. The faculty has to learn what problem-based curriculum really is.
b. A key cadre of enthusiasts has to be developed
c. The Dean's support is required (Abrahamson, 1998, p. 53)
d. Students have to understand going in of the uncertainties that may be encountered in implementing the approach.

Medical schools that have implemented problem-based learning successfully, including Harvard, have taken great pains to educate prospective users of the methodology and have involved the instructors in the development of instructional materials. Field trips have been taken to successful sites and consultants from experienced universities are brought in to guide the implementation in the new setting. In some cases, dual programs have been offered letting students and faculty work in the program of their choice, at least initially. Sufficient time is allowed for preparation bvefore entrance into the program

One university implementing a new doctoral program did not take an adequate amount of time, did not convince all of the professors of the soundness of the approach, did not prepare the students for the frustrations that might be encountered and by the end

of the first semester, the Dean, who was an initial supporter had decided that the doctoral students were in need of direct instruction, that an instructional injustice was being perpetrated on them, that the instruction that had been provided was superficial and not in depth, and that there was too much frustration associated with the approach. Thus, at the end of one semester the approach was killed, even though the leadership of the program had been charged with developing a new and innovative program for educational leaders based on problem-based learning.

3. Teacher and student roles change in a problem-based approach. The teacher becomes much more of a facilitator of learning and a resource person versus a dispenser of knowledge. Students have to become self-directed learners, have to work together to solve problems, and have to learn how to share findings that are critical to success. Being successful in the new approach requires adjustments on the part of each. It can be very frustrating for students who have been successful under a previous methodology to have to figure out what is needed to solve a problem and then acquire the necessary knowledge and skills to do so. Teachers may not be the sole source of wisdom in the new approach and this can be disconcerting for them.

4. Student assessment and educational program evaluation are extremely important. We are naturally concerned that the program designed consists of the very best program that can be developed to accomplish our professional objectives.

In evaluating problem-based learning, we need to review the objectives in order to assess outcomes. The medical educators at McMaster University in Canada in developing the original objectives for problem-based learning wanted to develop a curriculum that placed the emphasis on learning rather than teaching by:

a. making the student an active partner in the learning process,
b. increasing the perceived relevance of what is being learned,
c. focusing more on conceptual or deep understanding than rote memorization, and
d. having less scheduled time in the curriculum. (Woodward, 1998, p. 295)

The medical education pioneers decided to use patient problems as the cornerstone of curriculum planning. If we accept similar objectives and appropriate educational administration problems, we have to be able to measure whether administrators become better problem solvers, and will know how to seek out the information they need to solve future problems they will encounter in their professional careers.

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